

- 57 -

CLAIMS

1. An ink jet printing apparatus for printing by ejecting an ink containing a colorant from a print head,
5 comprising:

at least one ink absorber containing a coagulation inhibitor and absorbing the ink discharged from the print head, the coagulation inhibitor inhibiting a coagulation of the colorant contained in the ink.

10

2. An ink jet printing apparatus according to claim 1, further comprising a platen supporting a print medium from below in an area including a print area where the print head ejects the ink onto the print medium;

15

wherein the at least one ink absorber is installed in the platen to absorb the ink ejected outside the print medium when a printing operation is performed on edge portions of the print medium.

20

3. An ink jet printing apparatus according to claim 1, further comprising:

a preliminary ejection means for preliminary-ejecting the ink from the print head; and

25

a preliminary ejection receiver for accommodating the ink preliminary-ejected by the preliminary ejection means;

wherein the at least one ink absorber absorbs the ink

- 58 -

accommodated in the preliminary ejection receiver.

4 . An ink jet printing apparatus according to claim
1, further comprising:
5 an ink discharging means for discharging the ink from
the print head by other than an ejection; and
 an ink discharging path for transporting the ink
discharged by the ink discharging means;
 wherein the at least one ink absorber absorbs the ink
10 transported through the ink discharging path.

5 . An ink jet printing apparatus according to claim
4, further comprising:
15 a reaction liquid head for ejecting a reaction liquid,
the reaction liquid accelerating a coagulation of
colorant contained in the ink;
 a reaction liquid discharging means for discharging
the reaction liquid from the reaction liquid head; and
 a reaction liquid discharging path for transporting
20 the reaction liquid discharged by the reaction liquid
discharging means;
 wherein the at least one ink absorber absorbs the ink
transported through the ink discharging path and the
reaction liquid transported through the reaction liquid
25 discharging path.

6 . An ink jet printing apparatus according to claim

- 59 -

1, further comprising:

a reaction liquid head for ejecting a reaction liquid, the reaction liquid accelerating a coagulation of colorant contained in the ink.

5

7. An ink jet printing apparatus according to claim 1, further comprising:

a supply means for supplying the coagulation inhibitor to the at least one ink absorber.

10

8. An ink jet printing apparatus according to claim 7, wherein said supply means comprises a coagulation inhibiting liquid head for ejecting the coagulation inhibitor.

15

9. An ink jet printing apparatus for printing by ejecting an ink containing a colorant from a print head, comprising:

an ink absorber for absorbing the ink discharged from 20 the print head; and

an application means for applying a coagulation inhibitor to the ink absorber, the coagulation inhibitor inhibiting a coagulation of the colorant contained in the ink.

25

10. A method of manufacturing an ink absorber applicable to the ink jet printing apparatus of claim 1,

- 60 -

comprising the steps of:

 immersing the ink absorber in a liquid containing the coagulation inhibitor; and

 drying the ink absorber immersed with the liquid .

5

11. An ink absorber manufactured by the method of
claim 10 .